

T Cells Specific for Target Antigens and Methods and Vaccines Based Thereon

Abstract

5 The present invention relates to novel methods for the identification of
antigens recognized by cytotoxic T cells (CTLs) and specific for human tumors,
cancers, and infected cells, and the use of such antigens in immunogenic
compositions or vaccines to induce regression of tumors, cancers, or infections
in mammals, including humans. The invention encompasses methods for
induction and isolation of cytotoxic T cells specific for human tumors, cancers
10 and infected cells, and for improved selection of genes that encode the target
antigens recognized by these specific T cells. The invention also relates to
differential display methods that improve resolution of, and that reduce the
frequency of false positives of DNA fragments that are differentially expressed
in tumorous, cancerous, or infected tissues versus normal tissues. The invention
15 further relates to the engineering of recombinant viruses as expression vectors for
tumor, cancer, or infected cell-specific antigens.